

**FERROELECTRIC MEMORY DEVICES HAVING AN EXPANDED
PLATE ELECTRODE AND METHODS FOR FABRICATING THE SAME**

ABSTRACT OF THE DISCLOSURE

5 Ferroelectric memory devices are formed on an integrated circuit substrate. A
bottom interlayer dielectric layer is positioned on the integrated circuit substrate and a
plurality of ferroelectric capacitors are arranged in a row and column relationship on
the bottom interlayer dielectric layer. A top interlayer dielectric layer is disposed on a
surface of the integrated circuit substrate including the plurality of ferroelectric
10 capacitors. The top interlayer dielectric layer includes via holes disposed on and
associated with ones of the ferroelectric capacitors. A plate electrode is formed in the
top interlayer dielectric layer. The plate electrode extends into respective ones of the
via holes to contact top surfaces of at least two neighboring ones of the plurality of
ferroelectric capacitors. Methods of fabricating ferroelectric memory devices are also
15 provided

342468